Application No.: 09/937587

Case No.: 54676US002

REMARKS

Specification

The Examiner noted that the application did not contain an abstract of the disclosure as required by 37 CFR 1.72(b). Included with this response is an abstract on a separate sheet as requested.

Rejections under 35 U.S.C. 102

Claims 1-3 and 5-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Orensteen et al., U.S. Patent No. 5,508,105.

Each of the presently elected independent claims relate to a signage article comprising a substrate comprising an organic polymeric surface; a radiation cured coating disposed on the organic polymeric surface; and a marking material disposed on the radiation cured coating. Preferably, the marking material is not substantially removed from the signage article upon wiping the marking material with gasoline for five cycles, per claims 1 and 18.

Orensteen relates to polymeric sheeting material directly thermally printed upon with a thermal printing system with a resin-based colorant/binder. The polymeric sheeting materials comprise a core sheet and a thermally print receptive surface on the core sheet. The thermally print receptive surface may be formed from compositions comprising a polyurethane dispersion. The thermally print receptive surface is smooth, transparent, durable and weatherable.

The Examiner alleges that Orensteen teaches an aliphatic acrylated urethane (i.e. c-beam/UV-curable composition), relying upon col. 10, lines 14-49.

At col 10, lines 14-17, Orensteen states that, "An alternative composition forming a multi-function layer may comprises an aliphatic polyurethane dispersion and an acrylic emulsion, for example, of polymethyl methacrylate." At column 10, lines 43-49 this reference states that, "Multi-function layer formed from compositions comprising a polyurethane dispersion and an acrylic emulsion preferably do not contain a crosslinker, because urethanc/acrylic/crosslinker composition generally do not form multi-function layer that are directly thermally printable with a resin based colorant/binder."

Application No.: 09/937587

Case No.: 54676US002

Accordingly, Orensteen teaches away from crosslinked urethane/acrylic compositions. In addition although Orensteen teach that the multi-function layers may be formed from compositions having one or more crosslinkers in a polyurethane, (see column 9, line 12+) Orensteen fails to teach radiation cured compositions.

Rejections under 35 U.S.C. 103

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Orensteen et al. (5,508,105) in view of Frank et al. (5,153,618). The Examiner relies on Frank with respect to the teaching of a particular polymer in the resin-based colorant/binder.

The Applicants submits that since Orensteen fails to teach a radiation cured coating, the teachings of Frank fail to overcome the deficiencies of the primary reference.

Withdrawal of the rejections and a timely allowance is respectfully requested.

Respectfully submitted,

Date

Carolyn A. Fischer, Reg. No.: 39,091
Telephone No.: (651) 575-3915

Office of Intellectual Property Counsel 3M Innovative Properties Company

-20-03

Facsimile No.: 651-736-3833